

Claims

[c1] WHAT IS CLAIMED IS:

1.A transfer device for an inserting device, wherein the transfer device is rotatable about an axis of rotation extending transversely to a feed direction of articles being fed to the transfer device, the transfer device comprising:

at least one receptacle for the articles;

at least one transport unit for transporting the articles away in a transport direction transverse to the feed direction.

[c2] 2.The transfer device according to claim 1, further comprising a central shaft for driving the at least one transport unit.

[c3] 3. The transfer device according to claim 1, wherein at least two of the receptacles are distributed about a circumference of the transfer device.

[c4] 4. Transfer device according to claim 3, wherein the receptacles are identical.

[c5] 5. The transfer device according to claim 3, wherein the receptacles each have one of the transport units corre-

lated therewith.

- [c6] 6. The transfer device according to claim 1, wherein the transport direction of the at least one transport unit extends in a direction of the axis of rotation.
- [c7] 7. The transfer device according to claim 2, wherein the at least one transport unit has at least one endless circulating transport element.
- [c8] 8. The transfer device according to claim 7, wherein the at least one transport unit has two guide rollers and wherein the at least one transport element is guided about the guide rollers.
- [c9] 9. The transfer device according to claim 8, further comprising a first shaft, wherein a first one of the guide rollers is rotatably seated on the first shaft.
- [c10] 10. The transfer device according to claim 9, further comprising a second shaft, wherein a second one of the guide rollers is mounted fixedly on the second shaft.
- [c11] 11. The transfer device according to claim 9, further comprising an exterior pipe, wherein the first shaft projects transversely from the exterior pipe and is fastened to the exterior pipe.
- [c12] 12. The transfer device according to claim 11, further

comprising a drive shaft, wherein the exterior pipe surrounds the drive shaft across a portion of a length of the drive shaft length at a spacing.

- [c13] 13. The transfer device according to claim 12, wherein the drive shaft is a central drive shaft for all of the transport units.
- [c14] 14. The transfer device according to claim 13, further comprising a gear drive, wherein the central drive shaft is drivingly connected by the gear drive to the transport units.
- [c15] 15. The transfer device according to claim 14, wherein the gear drive is a bevel gear drive.
- [c16] 16. The transfer device according to claim 10, wherein the bevel gear drive comprises a first bevel gear fixedly mounted on the second shaft.
- [c17] 17. The transfer device according to claim 16, wherein the bevel gear drive comprises several first bevel gears and a common bevel gear engaged by the first bevel gears.
- [c18] 18. The transfer device according to claim 17, wherein the common bevel gear is mounted fixedly on the central shaft.

- [c19] 19. The transfer device according to claim 11, further comprising an exterior pipe and an inner pipe, wherein the exterior pipe rests against an inner pipe.
- [c20] 20. The transfer device according to claim 19, wherein the inner pipe is fixedly secured against rotation by a stationery holder.
- [c21] 21. The transfer device according to claim 19, wherein the articles are held by a suction force in the receptacle on a transport element of the at least one transport unit.
- [c22] 22. The transfer device according to claim 21, wherein the exterior pipe has at least one suction air passageway for each transport element.
- [c23] 23. The transfer device according to claim 22, wherein the inner pipe has at least one suction air passageway.
- [c24] 24. The transfer device according to claim 19, wherein the exterior pipe has an axis of rotation and is rotatably driven by the drive in a cycled fashion about the axis of rotation.
- [c25] 25. The transfer device according to claim 19, wherein the exterior pipe is mounted in a seal-tight way on the inner pipe.

- [c26] 26. The transfer device according to claim 23, wherein, for transporting the articles out of the receptacle, the exterior pipe is rotatable relative to the inner pipe such that the at least one suction air passage of the exterior pipe is in flow connection with the at least one suction air passage of the inner pipe as well as the respective transport elements.
- [c27] 27. The transfer device according to claim 22, wherein the at least one suction air passageway of the exterior pipe is a slot extending in a longitudinal direction of the exterior pipe.
- [c28] 28. Transfer device according to claim 23, wherein the at least one suction air passageway of the inner pipe extends in a circumferential direction of the inner pipe.
- [c29] 29. The transfer device according to claim 23, wherein a length of the at least one suction air passageway of the inner pipe is smaller than a spacing between neighboring ones of suction air passageways of the exterior pipe measured in a circumferential direction of the exterior pipe.
- [c30] 30. The transfer device according to claim 19, wherein the receptacle is delimited by at least two arms arranged substantially radially relative to the exterior pipe.

[c31] 31. A method for transferring articles by using the transfer device according to claim 1, the method comprising the step of:

rotating by a rotation process the articles from a first position into a second position on a rotation path; and at least during a portion of the rotation process, transporting the articles farther in a direction transversely to the rotation path.

[c32] 32. The method according to claim 31, wherein the articles are transported in a translatory movement at least during a portion of the rotation process.